

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

25871

7590

09/13/2005

SWANSON & BRATSCHUN L.L.C. 1745 SHEA CENTER DRIVE SUITE 330 HIGHLANDS RANCH, CO 80129 EXAMINER
TSAY, FRANK

PAPER NUMBER

ART UNIT

3672

DATE MAILED: 09/13/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,678	02/09/2004	Thomas J. Miller	CH2M.45	9441

TITLE OF INVENTION: HORIZONTAL BORE CRYOGENIC DRILLING METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	12/13/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(571) 273-2885 or <u>Fax</u>

appropriate. All further corrindicated unless corrected be maintenance fee notification	respondence including the I below or directed otherwise s.	Patent, advance ordin Block 1, by (a)	ders and notif	PUBLICATION FEE (if requirection of maintenance fees when the correspondence address)	vill be mailed to the current	correspondence address as	
	E ADDRESS (Note: Use Block 1 for 90 09/13/2005	any change of address)		Fee(s) Transmittal. The papers. Each additions	mailing can only be used f is certificate cannot be used al paper, such as an assignm e of mailing or transmission.	for any other accompanying	
	RATSCHUN L.L.C. ER DRIVE			Cel	rtificate of Mailing or Tran	smission g deposited with the United rst class mail in an envelope s above, or being facsimile date indicated below.	
	•					(Depositor's name)	
·						(Signature)	
				0	···-	(Date)	
APPLICATION NO.	FILING DATE	1	FIRST NAMED	INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/774,678	02/09/2004		Thomas J	J. Miller	CH2M.45	9441	
TITLE OF INVENTION: H	ORIZONTAL BORE CRYC	OGENIC DRILLIN	G METHOD			,	
APPLN. TYPE	SMALL ENTITY ·	ISSUE FI	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1400)	\$300	\$1700	12/13/2005	
EXAM	INER	· ART UN	IT	CLASS-SUBCLASS]		
TSAY, FRANK		3672	72 175-065000		-		
CFR 1.363). Change of correspondence address (or Change of Correspon Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Cus Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTI		ation form e of a Customer	(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Unless		elow, no assignee	data will appe	ear on the patent. If an assign	nee is identified below, the	document has been filed for	
(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)							
Please check the appropriate	assignee category or catego	ries (will not be pri	inted on the pa	atent): 🗖 Individual 🗖 C	orporation or other private g	roup entity Government	
4a. The following fee(s) are	enclosed:	4b	. Payment of I				
Issue Fee			☐ A check in the amount of the fee(s) is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.				
Publication Fee (No small entity discount permitted) Advance Order - # of Copies			The Director is hereby authorized by charge the required fee(s) or credit any overnayment to				
Advance Order - # 01	Copies		Deposit Acco	ount Number	(enclose an extra	copy of this form).	
5. Change in Entity Status a. Applicant claims St	(from status indicated above MALL ENTITY status. See	•	☐ b. Applica	ant is no longer claiming SMA	LL ENTITY status. See 37 (CFR 1.27(g)(2).	
The Director of the USPTO NOTE: The Issue Fee and Pointerest as shown by the reco	is requested to apply the Issu ublication Fee (if required) vords of the United States Pate	ue Fee and Publicat will not be accepted ent and Trademark	tion Fee (if and I from anyone Office.	y) or to re-apply any previous other than the applicant; a reg	ly paid issue fee to the applic istered attorney or agent; or	ation identified above. the assignee or other party in	
Authorized Signature							
Typed or printed name					ı No		
submitting the completed ap this form and/or suggestions Box 1450, Alexandria, Virgi Alexandria, Virginia 22313-	oplication form to the USP1 for reducing this burden, slinia 22313-1450. DO NOT 1450.	O. Time will vary hould be sent to the SEND FEES OR C	depending up e Chief Inform COMPLETED	to obtain or retain a benefit by lection is estimated to take 12 soon the individual case. Any contion Officer, U.S. Patent and FORMS TO THIS ADDRES lection of information unless it	omments on the amount of the ITrademark Office, U.S. Des S. SEND TO: Commissioner	partment of Commerce, P.O. r for Patents, P.O. Box 1450,	



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/774,678	02/09/2004	Thomas J. Miller	CH2M.45	9441	
25871	7590 09/13/2005		EXAMINER		
SWANSON & BRATSCHUN L.L.C.			TSAY, FRANK		
1745 SHEA CE SUITE 330	NTER DRIVE	ART UNIT	PAPER NUMBER		
HIGHLANDS RANCH, CO 80129			3672		
		•	DATE MAILED: 09/13/2005		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 157 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 157 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.